

To: Schaller, Andrea[schaller.andrea@epa.gov]
From: Reed, Marissa
Sent: Mon 12/7/2015 8:58:19 PM
Subject: Re: Seven Hills letter

Andrea,

Below is our draft language. I'm still working on the cumulative effects and conclusion, but these three sections are pretty close. The part in brackets under the general habitat/species information are the complete lists of waterfowl and state endangered birds that have been seen in the area. I didn't know if we would want to list all the species in the letter.

I have also attached a document I found in a folder today that provides information on coal mining in Indiana through 2014, and thought it might be of use to you also.

Sorry to get this too you so late! Talk to you tomorrow.

General habitat/species information

The Pigeon Creek floodplain is recognized as an extremely valuable resource for numerous and significant wildlife species, including migratory birds, non-game wildlife, and threatened and endangered species. Portions of the corridor contain Indiana Department of Natural Resources (IDNR) wetland conservation areas, and other portions are recognized for their unusually high diversity of bird species. The permit area is bordered on the east by an Audubon Society Important Bird Area and on the southeast by the IDNR Bluegrass Fish and Wildlife Area. Bird surveys by Audubon Society members in these two areas and in the Buckskin Bottoms area upstream of the permit area reported over 200 species of birds, including 25 species of waterfowl and 14 species listed as state endangered.

The affected wetlands and other bottomland forest provide essential habitat for state endangered and federally listed species including Indiana bats (*Myotis sodalis*), northern long-eared bats (*Myotis septentrionalis*), evening bats (*Nycticeius humeralis*), cerulean warblers (*Setophaga cerulean*), northern harriers (*Circus cyaneus*), and copperbelly water snakes (*Nerodia erythrogaster neglecta*). All of these species and several state species of special concern have been documented within the permit area.

[State endangered: northern harrier, least bittern, black-crowned night heron, black tern, Henslow's sparrow, osprey, yellow-headed blackbird, short-eared owl, sedge wren, marsh wren, barn owl, Virginia rail, American bittern, and loggerhead shrike.

Waterfowl: Canada goose, gadwall, mallard, hooded merganser, red-breasted merganser, bufflehead, ruddy duck, wood duck, northern shoveler, lesser scaup, American wigeon, redhead,

ring-necked duck, green-winged teal, common goldeneye, northern pintail, snow goose, canvasback, American black duck, tundra swan, greater scaup, cackling goose, white-winged scoter, common merganser, and mute swan.]

Federally listed species

The proposed project is within the range of the federally endangered Indiana bat, and the federally threatened northern long-eared bat. An Indiana bat maternity colony from a known primary roost tree has been documented using the southern portion of the proposed permit area for foraging, and bat survey results indicate the presence of an additional maternity colony which forages on the northern end of the permit area. Although it has not been addressed in the permit application, at least one northern long-eared bat maternity colony has also been documented using the permit area with the capture of reproductively active females during bat surveys. The proposed mining activity will temporarily or permanently eliminate approximately 690 acres of summer habitat for these species and restored forest will not become suitable habitat for many years.

The copperbelly water snake is known to have reproducing populations along the Pigeon Creek corridor, with known records of individuals in the permit area. This species is federally listed as threatened in the northern part of its range, but listing was precluded in Southern Indiana due to the development of a Copperbelly Water Snake Conservation Agreement and Strategy endorsed by the FWS, the Indiana DNR, and the Indiana Coal Council (Agreement). Even though it has expired, the Agreement has proven effective at avoiding and conserving copperbelly water snake habitat. This permit application is the first action we are aware of that would not follow the tenants of the Agreement. This type of mining activity in prime habitat could cause the FWS to re-evaluate listing of the southern population of the copperbelly water snake.

Mitigation

Proposed wetland mitigation comprises both on-site and off-site, in and out-of-type. Proposed on-site mitigation consists of reclamation of disturbed wetlands. The FWS asserts that wetlands of this magnitude and in this landscape location cannot be adequately restored based on the failure of previous efforts associated with the North Millersburg Mine. The North Millersburg mined land on the east side of the Pigeon Creek floodplain was to have been restored to its pre-mining condition of bottomland forest. The finished topography on much of the reclaimed area is too high in elevation to function as bottomland forest. Whereas the original intention of the reclamation plan was to reproduce floodplain elevations with forest surrounding the impoundments, in some areas the land adjacent to the impoundments looks more like rolling hills than floodplain. The area now consists chiefly of a mixture of upland fields, upland non-forested wildlife habitat and large, shallow permanent impoundments.

In addition to the on-site reclamation, the applicant proposes off-site mitigation totaling 448.11 acres forested wetland on Greathouse Island, an abandoned oxbow of the Wabash River, in Posey County, Indiana. Proposed mitigation measures include reforestation on 316.9 acres of open land and enhancement of 258.9 acres of existing forested wetland. According to the application, the enhancement areas will be selectively harvested to reduce the existing canopy cover by 50 percent. It is unclear how harvesting trees from an existing forested wetland will provide mitigation for forested wetland impacts.

Combining both on-site and off-site, the proposed mitigation ratio is 2:1, which is only half of the typically required ratio of 4:1 for forested wetlands. In support of this reduced ratio, the applicant states that off-site mitigation will begin once the permit is issued, thereby offsetting both temporal and cumulative loss. Because it will take some years before the off-site mitigation is established and it is nearly 40 miles and two watersheds away from the impact area, it is unlikely to offset either the temporal or cumulative loss of wetlands.

Further, the applicant claims that the off-site mitigation will provide additional habitat for the federally endangered Indiana bat, as well as several other bat species. While the mitigation, if successful, will provide habitat for the Indiana and northern long-eared bat, and other wildlife, it will take several years before it is suitable foraging habitat and many more years before it becomes suitable roosting habitat. Also, the off-site mitigation will not provide any benefit to the known maternity colonies in the proposed permit area, as both Indiana and northern long-eared bats display high site fidelity, returning to the same roosting habitat year after year.

Marissa Reed
Wildlife Biologist
U.S. Fish & Wildlife Service
Ecological Services Field Office
620 S. Walker Street
Bloomington, IN 47403
Phone - 812-334-4261 ext. 1215
Fax - 812-334-4273

On Fri, Dec 4, 2015 at 1:44 PM, Reed, Marissa <marissa_reed@fws.gov> wrote:

Andrea,
Thanks for sending this information - it all sounds really good so far! As we discussed on the phone yesterday, here is the information on the DNR conservation easement UMI would like to relocate.

Have a great weekend!

Marissa

Marissa Reed
Wildlife Biologist
U.S. Fish & Wildlife Service
Ecological Services Field Office
620 S. Walker Street
Bloomington, IN 47403
Phone - 812-334-4261 ext. 1215
Fax - 812-334-4273

On Thu, Dec 3, 2015 at 12:58 PM, Schaller, Andrea <schaller.andrea@epa.gov> wrote:

DRAFT Deliberative

Marissa,

Still working on details here is the follow by topic in the letter, so you can see how we are framing it.

Intro paragraph

Proposed Impacts and Existing Conditions

Purpose and Need

Single and Complete Project

Significant Degradation

Aquatic Resources of National Importance

Scope of NEPA analysis

Preparation of an Environmental Impact Statement

- Cumulative Impacts
- Unique characteristics of the geographic area
- Public Health or Safety
- Threaten and Endangered Species

Mitigation and Monitoring

Below are a few sections of the letter. Anything you can add would be great we can add additional sections as well. Let me know if you have questions.

Andrea

Proposed Impacts and Existing Conditions

United Minerals Company, LLC (United Minerals) proposes to impact 510.16 acres of wetlands (of which 463.18 acres are forested wetlands), 53,840 linear feet of streams and 72.85 acres of open water, for the construction of the 1,679.6 acre Seven Hills Mine in the Highland-Pigeon Creek watershed southeast of Elberfeld in Warrick County, Indiana. Approximately 648.5 acres of the site have been previously mined and reclaimed in the 1990s and is not proposed to be impacted for coal extraction. Both agencies have commented on the preliminary plan for this mine, and we want to highlight the following comments based on our review of the permit application.

In addition to the habitat value of natural areas, bottomland hardwoods serve a critical role in the watershed by reducing the risk and severity of flooding to downstream communities by providing areas to store floodwater. These wetlands improve water quality by filtering and flushing nutrients, processing organic material, and reducing sediment before it reaches open water.^[1]

Need to add Numbers on local forested wetland loss. Could expand more on habitat and usage by species on site.

United Minerals asserts that the additional range of habitat types that would result from reclamation at the Seven Hills Mine site will be an improvement over existing conditions. This this assertion is not supportable given the high acreage of forested wetlands that would be lost and well as the companies demonstrated issues in developing mitigation on the nearby Somerville Mine and XXXX Mine. Discuss WQ Issues and issued/failure due to designing wetlands too high.

Aquatic Resources of National Importance (I am still drafting the ARNI section but this is the start working on the Ohio River section now.)

The agencies consider the Ohio River, Pigeon Creek and the bottomland hardwoods in the Pigeon Creek watershed as ARNIs due to their value and significance. The bottomland hardwood forests within the Pigeon Creek floodplain are an important and productive habitat. These bottomland hardwoods serve a critical role in the watershed by reducing the risk and severity of flooding to downstream communities by providing areas to store floodwater. In addition, these wetlands improve water quality by filtering and flushing nutrients, processing organic wastes, and reducing sediment before it reaches open water. Indiana has lost eighty-five percent of their wetlands, large remaining tracks are rare. The bottomland hardwoods surrounding Pigeon Creek are home to federal both and state endangered and threatened species. Nearby bird surveys in the Buckskins Bottoms have reported over 180 species of birds, 9 of which are state endangered species. Given the proximity and similarity of habitat it is like highly likely that many of those bird species also use this area.

These valuable wetlands help protect both Pigeon Creek and the Ohio River. Pigeon Creek flows approximately 47.5 miles bisecting downtown Evansville before joining with the Ohio River. During the 1800's, Pigeon Creek was part of the Wabash-Erie Canal and a portion of the Pigeon creek onsite is part of the former canal. Today, the creek provides several recreational paths and fishing habitat for the public to enjoy. The City of Evansville has developed the Pigeon Creek Greenway Passage. This path is a multiuse trail follows the creek and then extends along the banks Ohio River it also incorporates boat launches that the City of Evansville touts as "an important urban watershed and wildlife corridor where you might see an egret or blue heron. With its diversity of plants and animals, the Greenway serves as an outdoor classroom and a valuable learning tool for the environment."^[2] In 2004, the path was designated a National Recreation Trail by the National Parks Service.

The Ohio River.....Working on this part now

Here are the NEPA bullets on the general area and TE species

• **Unique characteristics of the geographic area**[3]: The mine site includes areas which the agencies consider to be ARNIs due to their value and significance: the Pigeon Creek, and the bottomland hardwoods in the Pigeon Creek watershed. The subwatershed (12-digit HUC Clear Branch Pigeon Creek) watershed is a candidate for protection per Indiana Department of Environmental Management (IDEM) watershed management plans. According to the Indiana Wetlands Conservation Plan, wetlands serve important functions, both in human benefits such as maintaining the quality of drinking water and controlling flooding, and in environmental benefits, such as providing habitat wildlife, including for threatened and endangered resources. The resources proposed for impact onsite are used by an endangered species, a threaten species, and a candidate species. The fact that eighty five percent of the wetland resources once present in Indiana have been lost or altered makes remaining wetlands especially critical resources for conservation.[4] Based on the scale of the proposed project's impacts to important aquatic resources and other ecologically critical areas, the agencies view the preparation of an EIS as appropriate.

• **Threatened and Endangered Species**[5]: The proposed Seven Hills Mine is within the range of the endangered Indiana bat (*Myotis sodalis*) and the threatened Northern long-eared bat (*Myotis septentrionalis*). There are maternity roosts for both bat species that utilize the proposed mine site and this proposed mine would impact 690 acres of summer habitat for them. Additionally, the Copperbelly watersnake (*Nerodia erythrogaster neglecta*), was previously proposed for inclusion on the federal threatened species list. The southern population of the Copperbelly watersnake was excluded from listing as threatened due to the development of the Copperbelly Watersnake Conservation Agreement and Strategy which has since expired. Until this point, actions to list of the southern population have not taken place as other development and mining operations have continued to follow the agreement's principles. Potential impacts to threatened or endangered species are considered grounds for the preparation of an EIS.

From: Reed, Marissa [mailto:marissa_reed@fws.gov]
Sent: Thursday, December 03, 2015 10:24 AM

To: Schaller, Andrea <schaller.andrea@epa.gov>
Subject: Seven Hills letter

Hi Andrea,

I just tried calling, but kept getting a weird beeping tone and my phone display read "waiting for a line". Anyway, I got your message about sending you some draft language. I will do my best to get you something by Monday - I am mainly just adding some specific details to what was in our previous letter. Feel free to give me a call if you want to discuss further, or I may try you again in a little bit.

Thanks,

Marissa

Marissa Reed

Wildlife Biologist

U.S. Fish & Wildlife Service

Ecological Services Field Office

620 S. Walker Street

Bloomington, IN 47403

Phone - 812-334-4261 ext. 1215

Fax - 812-334-4273

[1] <http://water.epa.gov/tvpe/wetlands/bottomland.cfm>

[2] <http://www.evansville.gov/modules/showdocument.aspx?documentid=12739>

[3] 40 CFR 1508.27(b)(3)

[4] Status and Trends Report on State Wetland Programs in the United States.

[5] 40 CFR§ 1508.27(b)(9)